UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/499,720	02/08/2000	Dale C. Morris	10991915-1	1658

22879   7590   04/29/2004

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EXAMINER
INOA, MIDYS

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _14 April 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-24_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-24_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _08 February 2000_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _2 and 3_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Comments

1.   This office action is in response to the communication dated April 14th, 2004, which

requests the resubmission of the office action dated April 8th, 2004.

Information Disclosure Statement

2.   The information disclosure statements (IDS) submitted on November 21st, 2000 and

February 19th, 2003 have been considered by the examiner.

Drawings

3.   The drawings filed on February 8th, 2000 have been accepted by the examiner.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Mahon et al.

(4,809,160).

Regarding Claims 1 and 6, Mahon et al. discloses a method of promoting a current

privilege level wherein the current privilege level controls application instruction execution in

the system by controlling accessibility to the system resources (Column 1, line 55 – Column 2,

line 45), the method comprising: performing a privilege level promotion instruction by the

operating system, the privilege promotion instruction being stored in a first page of memory not

writeable by application instructions at a first privilege level ("store access rights of calling

routine in T register"), the privilege promotion instruction including: reading a stored previous

privilege level state ("read access rights of calling routine"); comparing the read previous

privilege level state to the current privilege level ("Compare", "Access = OK?"); and if the

previous privilege level state is equal to or less privileged than the current privilege level,

promoting the current privilege level to a second privilege level which is higher than the first

privilege level ("raise access rights to access rights of gateway", see Figure 2).

Regarding Claims 12, 17 and 23 Mahon et al. discloses a computer system comprising a

processor (Figure 1, Instruction Unit 20) having current privilege level which controls

accessibility to the system resources (Column 1, line 55 – Column 2, line 45) and having a

previous privilege level state ("access rights of page containing gateway", Figure 2); a memory

(Figure 1, Target Register File 80) having a plurality of memory pages including a first memory

page storing a privilege promotion instruction ("Target Register 70") and not writeable by

application instructions at a first privilege level ("store access rights of calling routine in T

register"); and performing the privilege level promotion instruction as follows: reading a stored

previous privilege level state ("read access rights of calling routine"); comparing the read

previous privilege level state to the current privilege level ("Compare", "Access = OK?"); and if

the previous privilege level state is equal to or less privileged than the current privilege level,

promoting the current privilege level to a second privilege level which is higher than the first

privilege level ("raise access rights to access rights of gateway", see Figure 2).

Regarding Claims 2, 8, 13, and 19, Mahon et al discloses the method of promoting a

current privilege level wherein the step of performing the privilege promotion instruction further

includes: if the previous privilege level state is more privileged then the current privilege level ("Access = No"), taking an illegal operation fault ("Trap Gateway", see Figure 2).

Regarding Claims 3, 9, 14, and 20, Mahon et al discloses the method of promoting a current privilege level wherein the system resources include system registers (Figure 1, Target Register File 80 and Target Register 70).

Regarding Claims 4, 10, 15, and 21, Mahon et al discloses the method of promoting a current privilege level wherein the system resources include system instructions ("calling routine", Figure 2).

Regarding Claims 5, 11, 16, and 22 Mahon et al discloses the method of promoting a current privilege level wherein the system resources include memory pages (Figure 1, Physical Memory 40).

Regarding Claim 7, 18, and 24 Mahon et al discloses the method of promoting a current privilege level further comprising: performing a return instruction including: transferring instruction control flow to the stored return address to the first page of memory ("execute service routine", Figure 2); and demoting the current privilege level to the stored previous privilege level ("Return access rights of service routine per contents of the T register", Figure 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Midys Inoa whose telephone number is (703) 305-7850. The examiner can normally be reached on M-F 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mano Padmanabhan can be reached on (703) 306-2903. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Midys Inoa
Examiner
Art Unit 2188

MI

GARY PORTKA
PRIMARY EXAMINER